

JOB COMPLETION REPORT
INVESTIGATIONS PROJECTS

State of Montana

Project No. F-7-R Work Plan No. II Job No. II-B

Title of Job: Inventory of the Project Area's Waters from the Standpoint of
Fish Response to Environment.

Objectives:

There is little information of growth of fish in this area of the state and very little is known of the species composition. The purpose of this job is to get data on the various kinds of fish in this area, together with their abundance and their growth.

Techniques Used:

Scale samples were taken at every opportunity and the fish were aged at the Montana Fish and Game Department Laboratory, Montana State College, Bozeman. Composition of various lakes were taken by gill net, and that of some streams by the electric shock method.

Findings:

The following is a list of the streams and lakes worked with the species composition and growth rates of the various fish caught.

Ashley Creek - Section 15, T28N, R22W. Collected August 8, 1951 by electric shock method. Fish present were rainbow, rainbow x cutthroat, sunfish, squawfish, suckers and perch.

Section I-A		ANNULUS				
Sample: 2 rainbow x cutthroat		I	II	III	IV	V
No. of calculated lengths						
averaged		2	2			
Average length		4.3	8.9			
Sample: 5 rainbow						
No. of calculated lengths						
averaged		5	2	1	1	1
Average length		3.5	7.7	13.5	15.4	17.4
Section I-B						
Sample: 3 rainbow						
No. of calculated lengths						
averaged		2	1	1		
Average length		4.1	8.1	12.3		

Ashley Lake - T28N, R24W. Collected from spawning traps June 14, 1951.
Fish present were cutthroat trout, redbreast shiner and the longnose sucker.

Sample: 10 cutthroat	I	II	III	IV	V
No. of calculated lengths					
averaged	10	10	10	1	1
Average length	4.2	8.5	14.7	13.2	16.5

Bailey Lake - Section 3, T31N, R20W. Collected August 23, 1949

Sample: 21 Sunfish	I	II	III	IV	V	VI	VII
No. of calculated lengths							
averaged	21	21	21	21	16	15	14
Average length	.6	1.6	2.2	2.6	2.8	3.0	3.3

Big Salmon Lake - T21 & 22N, R14W. Collected June 1 and 2, 1950.

Sample: 4 cutthroat	I	II	III	IV	V
No. of calculated lengths					
averaged	4	4	2	2	1
Average length	3.2	5.8	7.0	10.2	13.2

Flathead Lake - Collected August 16, 1950.

Sample: 2 Coho	I	II	III
No. of calculated lengths			
averaged	2	2	1
Average length	3.6	8.2	10.4

Sample: 1 Dolly varden	I	II	III	IV
No. of calculated lengths				
averaged	1	1	1	1
Average length	4.5	7.6	10.4	13.9

Hemlock Lake - Section 1, T19N, R18W. Collected August 28, 1950

Sample: 5 cutthroat	I	II	III
No. of calculated lengths			
averaged	5	5	1
Average length	5.3	7.6	8.6

Lion Creek - Section 9, T22N, R17W. Collected July 27, 1951 by the electric shock method. Fish present were dolly varden trout, eastern brook trout, cutthroat trout and whitefish.

Section I

Sample: 2 eastern brook	I
No. of calculated lengths	
averaged	2
Average length	5.0

Sample: 4 Dolly varden	I
No. of calculated lengths averaged	4
Average length	3.7

Section II

Sample: 3 cutthroat trout	I	II
No. of calculated lengths averaged	3	2
Average length	3.1	5.2

Sample: 2 eastern brook	I	II
No. of calculated lengths averaged	2	1
Average length	4.4	6.5

Sample: 2 Dolly varden	I
No. of calculated lengths averaged	2
Average length	4.4

Bootjack Lake - Section 26, T31N, R23W. Collected May 10, 1951, in a 14 hour gill net set. Fish present were squawfish, suckers, sunfish and whitefish.

Horseshoe Lake - Section 23, T27N, R28W. Collected May 22, 1952, in three gill nets set for 21 hours each. Fish caught were squawfish, coarse scaled suckers, eastern brook trout, cutthroat trout and whitefish.

Little Bitterroot Lake - Sections 5 & 8, T27N, R24W. Collected by angling June 25, 1951.

Sample: 14 rainbow trout	I	II	III
No. of calculated lengths averaged	14	14	14
Average length	2.7	9.2	13.9

Little Bitterroot River - Section 27, T25N, R24W. Collected by electric shock method August 8, 1951. Fish captured were cutthroat trout, eastern brook trout, and squawfish.

Section IA

Sample: 9 eastern brook	I	II
No. of calculated lengths averaged	7	1
Average length	3.4	5.7

Sample: 20 cutthroat	I
No. of calculated lengths averaged	19
Average length	4.3

Section IB

Sample: 6 eastern brook	I	II	III
No. of calculated lengths averaged	6	3	1
Average length	3.2	6.4	10.4

Sample: 20 cutthroat trout	I
No. of calculated lengths	
averaged	20
Average length	4.1

Lone Pine Reservoir - Section 34, T23N, R24W. Fish collected by rotenone on October 16, 1951. Maximum area 322 acres with a draw-down to 60 acres. Fish found to be present were, reidside shiner, yellow perch, squawfish, suckers, and sunfish.

Pinkham Creek - T62 & 63N, R27W. Collected July 31, August 1 & 2, 1951, by electric shock method. Fish present were rainbow trout and eastern brook trout.

Section IA

Sample: 7 rainbow trout	I
No. of calculated lengths	
averaged	7
Average length	4.0

Sample: 23 eastern brook	I
No. of calculated lengths	
averaged	10
Average length	4.3

Section IB

Sample: 19 rainbow	I	II
No. of calculated lengths		
averaged	16	3
Average length	4.2	6.6

Section IIA

Sample: 4 eastern brook	I	II
No. of calculated lengths		
averaged	2	1
Average length	4.1	7.0

Section IIB

Sample: 5 rainbow	I
No. of calculated lengths	
averaged	2
Average length	4.9

Sample: 26 eastern brook	I	II
No. of calculated lengths		
averaged	15	1
Average length	4.2	5.9

Section IIIA

Sample: 4 rainbow	I
No. of calculated lengths	
averaged	3
Average length	4.4

Sample: 20 eastern brook	I
No. of calculated lengths	
averaged	11
Average length	4.5

Section IVA

Sample: 16 eastern brook	I	II
No. of calculated lengths		
averaged	15	3
Average length	4.4	5.9

Savage Lake - Section 27, T31N, R33W. Fish collected by gill net in an 18 hour set. Fish present were rainbow trout, sunfish and carp. Taken December 10, 1951.

Smith Creek - Swan River Drainage. Fish were taken by anglers during July 1951.

Sample: 59 eastern brook	I	II	III
No. of calculated lengths			
averaged	57	53	17
Average length	4.0	7.3	10.4

Sample: 9 cutthroat	I	II	III
No. of calculated lengths			
averaged	9	9	3
Average length	3.0	5.8	8.9

Smith Lake Rearing Pond - Section 32, T32N, R22W. Collected June 22, 1951 in spillway.

Sample: 26 cutthroat trout	I	II
No. of calculated lengths		
averaged	24	1
Average length	3.7	9.0

Stillwater River - Section 23, T31N, R23W. Collected by the electric shock method August 6, 1951. Fish present were cutthroat trout, squawfish, suckers, shiner, Cottus, whitefish and rainbow trout.

Sample: 1 rainbow trout	I
No. of calculated lengths	
averaged	1
Averaged length	2.6

Sample: 1 cutthroat	I	II
No. of calculated lengths		
averaged	1	1
Average length	2.8	6.1

Sullivan Creek - Section 25, T24N, R24W. Fish collected by dip net on August 24, 1951. Fish present were reidside shiners.

South Fork Flathead River - Section 22, T30N, R19W. Collected September 21, 1951 by the electric shock method. Fish present were dolly varden trout, kokanee, cutthroat trout, whitefish, suckers and squawfish.

Trail Creek - Section 28, T37N, R22W. Collected September 22, 1951 by the electric shock method. Fish captured were dolly varden trout and eastern brook trout.

Analysis and Recommendations:

The above data is just a start on what is desired in this part of the state. This work should be continued so that comparisons of growth and species composition in the various drainages may be made.

Summary:

Age growth studies of some streams and lakes are reported, and species composition in some of the waters.

Data and Reports:

The original data and related reports are with the project leader at Somers, Montana.

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Approved by



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